

Detroit River International Wildlife Refuge

Comprehensive Conservation Plan Workshop

**October 15-17, 2002
Lake Erie MetroParks
Brownstown Township, MI**

DRAFT REPORT

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**Summary of Detroit River International Wildlife Refuge
Comprehensive Conservation Plan Workshop**

The Workshop resulted in a new vision statement for the refuge, a set of goals, and objectives for each goal. The vision statement and goals were derived from the recent Canada/U.S. Lower Detroit River Ecosystem visioning process (Metropolitan Affairs Coalition, October 2001). In summary, the following is the draft vision statement and draft goals for the refuge. The objectives for each goal will be presented in the main body of this report.

Vision Statement for Lower Detroit River Ecosystem (2001)

“In 10 years the Lower Detroit River Ecosystem will be an international conservation region where the health and diversity of wildlife and fish are sustained through protection of existing significant habitats and rehabilitation of degraded ones, and where the resulting ecological, recreational, economic, educational and ‘quality of life’ benefits are sustained for present and future generations.”

Draft Vision Statement for the Detroit River International Wildlife Refuge (Workshop)

"The Detroit River International Wildlife Refuge, including the Detroit River and Western Lake Erie Basin, will be a conservation region where a clean environment fosters the health and diversity of wildlife, fish, and plant resources through protection, creation of new habitats, management, and restoration of natural communities and habitats on public and private lands. Through effective management and partnering, the refuge will provide outstanding opportunities for “quality of life” benefits such as hunting, fishing, wildlife observation and environmental education, as well as ecological, economic, and cultural benefits, for present and future generations."

Draft Goals for the Detroit River IWR

- 1) Establish functional partnerships involving communities, industries, governments, citizens, non-profit organizations and others to manage and promote the Refuge consistent with the plan's vision statement and the Act which created the Refuge. Provide an institutional framework to develop effective private or public partnerships for the purpose of sustainability.
- 2) The Refuge will facilitate and promote hunting, fishing, wildlife observation, wildlife photography, environmental education, and interpretation as wildlife dependent recreational uses.
- 3) Visitors and local citizen's demonstrate a strong conservation ethic that supports the Refuge and broad based environmental awareness.
- 4) Future development that occurs within surrounding watersheds that may impact the Refuge is well planned, environmentally sustainable, and reflects known best management practices.
- 5) People living or working within the Refuge watersheds will understand and appreciate the importance and ecological value of the Detroit River and Western Lake Erie, and their contributing watersheds, to fish and wildlife and to human quality of life.
- 6) The hunting, fishing, and trapping heritage, cultural resources and cultural history of the Refuge are valued and preserved, and connect Refuge staff, visitors, and the community to the area's past.
- 7) Fish & Wildlife communities are healthy, diverse and self-sustaining.
- 8) Reduce levels of toxic substances to a threshold that does not threaten or harm or adversely affect wildlife, fish or human health.
- 9) Economic development and redevelopment is environmentally sustainable, well planned, and aesthetically pleasing.
- 10) Restore beneficial uses of water resources in the refuge.
- 11) Lands and waters within the Refuge are responsibly managed to resolve potentially conflicting uses.

Introduction

The Comprehensive Conservation Plan (CCP) process for the Detroit River International Wildlife Refuge (IWR) began earlier this year with interagency meetings, discussions with stakeholders, and open houses for the public to scope issues, concerns and opportunities. The next step in the planning process is to develop a vision statement, management alternatives, and a set of goals and objectives for each alternative. To that end, the CCP Planning Team held a workshop on October 15-17, 2002 at the Lake Erie MetroParks facility in Brownstown Township.

List of Attendees

Trish Beckjord	SmithGroup JJR
Jim Bull	Detroit Audubon Society
Robert Burns	Friends of the Detroit River
Jim Dastyck	U.S. Fish and Wildlife Service
Doug Denison	SmithGroup JJR
Ed DeVries	U.S. Fish and Wildlife Service
Lauri Elbing	Office of Congressman John Dingell
Rose Ellison	U.S. Environmental Protection Agency
Jim Francis	Michigan DNR, Fisheries
Don Griffin	Friends of the Detroit River
Laurine Griffin	Friends of the Detroit River
Becky Goche	U.S. Fish and Wildlife Service
Bruce Jones	Grosse Ile Nature and Land Conservancy
Ernie Kafkas	Michigan DNR, Wildlife
Joshua Krammes	County of Wayne, Michigan
Colette Luff	U.S. Army Corps of Engineers
John Merriman	Environment Canada
Gary Muehlenhardt	U.S. Fish and Wildlife Service
Bruce Manny	USGS, Biological Resources Division
Steve Muyskens	Trust for Public Lands
John Paskus	Michigan Natural Features Inventory
Tim Payne	Michigan DNR, Wildlife
Doug Pearsall	The Nature Conservancy
Paul Petersen	Michigan DNR, Parks and Recreation
Ross Powers	U.S. Environmental Protection Agency
Joe Robison	Michigan DNR, Wildlife
Doug Spencer	U.S. Fish and Wildlife Service
Gary Towns	Michigan DNR, Fisheries

Expectations of Attendees

To open the workshop, each first-day participant was asked to fill out a contact information form and answer two questions. Many participants had similar expectations and primary issues. Here are a few examples of the types of answers provided by respondents:

What is your personal goal or expectation for this workshop?

- ?To be an active participant in helping to formulate strategies for restoration and conservation through fostering business and community partnerships.
- ?Establish a framework for the conservation and management plan for the Refuge.
- ?Learn more about the U.S. side of the Detroit River.
- ?To the extent practical, help align goals in the CCP with goals of other programs.
- ?Get a better understanding of how the refuge system works and express fisheries interests in the development of the plan.
- ?To provide representation for conservation and sportsman issues.
- ?Develop guidelines for working relationships with the wide diversity of partners.

What do you see as the primary conservation issue for the Detroit River International Wildlife Refuge in the next 25 years?

- ?Loss of habitat.
- ?Degradation of habitat through invasive species.
- ?Protection, conservation and rehabilitation of remaining ecologically significant areas.
- ?Working through lands under private ownership to build support and momentum for the Refuge.
- ?Environmental education (that will lead to) protection and preservation of natural resources.
- ?Reversion of industrial sites suitable to sustain desired habitats.
- ?Loss of fishing and hunting opportunities.

Small Group Exercises

The following are the notes from each of the two working groups. The notes have been partially edited for spelling, punctuation and grammar. Each small group reviewed and edited the same vision statement and got together in a plenary session to combine edits. For the remaining exercises, in general, Group 1 was responsible for developing goals and objectives for public use and partnership aspects of the refuge. Group 2 worked through the habitat protection/restoration and contaminant issues.

Vision Exercise

(Group 1)

Group 1 Discussion:

Include plant resources, human environment, how do we fit into this plan? Look at the purpose of why this refuge was established.

Partnerships, what level, private landowners, habitat on private lands (percentages), develop partnerships for management of the refuge. Quantify how much private land can partner in this refuge. International partnerships? Important to make international....it is the only international refuge in North America. We have to be careful not to dictate to the Canadians on how to manage their lands. Working with the Canadians to complement their work is important. Need to address acquisition or expansion of lands for preservation.

Strike existing habitats from present vision. Need to identify the Lake Erie coastal areas in vision.

Need to identify the tribes involvement in this vision. Need to strike out Lower Detroit River to Detroit River, need to identify Lake Erie. Need to include fish communities and goals. Need to add cultural heritage, tribes.

Diversity of indigenous species, what about invasive species?

Draft Vision for Group 1

In 25 years, the Detroit River International Wildlife Refuge including the Detroit River and Western Lake Erie Basin will be an international conservation region where a clean environment fosters the health and diversity of wildlife, fish, and plant resources through protection, management, and restoration of significant natural communities and habitats on public and private lands. Through effective management and partnering, the refuge will provide for present and future generations, outstanding public use opportunities for "quality of life" benefits, such as hunting, fishing, and other recreational uses, as well as ecological, economic, educational, and cultural activities.

(Group 2)

Task: Review existing vision statement and adopt or revise.

Questions: Does vision embody what Congress passed?
Does it incorporate what we envision?

Elements of Congressional language:

Missing in Vision Statement:

? Partnerships.

- ? Change 10 yrs to 25 - 50? Consider removing timing from vision altogether and incorporate in the plan specifics
- ? Define the “big 6” within the elements of the vision statement

Other missing elements not addressed in the Congressional language:

- ? Creation of new habitat?
- ? Address boating rights
- ? How do you balance economy and ecology?

Proposed changes to the vision statement:

1. Add “ ...sustained BY PARTNERSHIPS FOR protection...”
2. Delete specific time frame reference. Begin the statement as “The International Wildlife Refuge will serve as a conservation region that embodies the United States and Canada....”
3. Delete “significant” from the vision statement and include it in the elements such as “Give emphasis to ecologically (biologically) significant parcels
4. “...protection of existing habitat, rehabilitation of degraded ones and creation of new habitat...”

Additions/Changes to the Elements

Change time frame

1. List the 6 basics: hunting, fishing, wildlife observation and photography, and environmental education and interpretation
2. Add: The river and its associated wetland and upland ecosystems are functioning within the variability of these natural systems considering elements of ecological integrity such as size, condition (structure and composition) and landscape context (connectivity and ecological systems)
3. Communities, private citizens, commercial businesses non-profit organizations, and local governments will be actively involved in supporting and implementing the vision and goals of the refuge in partnership with state, federal and provincial agencies.
4. New wetland and upland habitat habitats are added as appropriate to the local area.
5. Give clearer definition to the importance of environmental education and community outreach in accomplishing the goals and vision of the plan
6. Address the importance of recreational boating on the river
7. Specifically address preservation of hunting and fishing rights in the refuge.
8. Ensure looking to restore connectivity between ecological systems is included in the vision statement elements
9. More clearly define “quality of life” in terms of the range of microorganisms to people.
10. Give emphasis to ecologically (biologically) significant parcels for protection

Draft Vision Statement for Group 2:

The International Wildlife Refuge will serve as a conservation region that embodies the US and Canada, where the health and diversity of wildlife and fish

are sustained by partnerships for protection of existing habitats, rehabilitation of degraded ones and creation of new ones where the resulting ecological, recreational, economic, educational, and “quality of life” benefits are sustained for present and future generations.

Issue Scoping and Prioritization

Each group was asked to review the list of issues, concerns, and opportunities that came from the series of public open house events held in June 2002. Group 1 reviewed the habitat and wildlife-based issues and Group 2 reviewed the public use-based issues. The groups were asked to list missing issues and determine the top 3 issues from each category facing the refuge.

Group 1: Land protection & restoration; Landscape Issues; Wildlife Habitat; Aquatic Habitat & Fisheries; Environmental Contaminants

Task: Review issues identified in Public Scoping Sessions and identify 3 main Issues.

Group 1 Discussion:

Land Protection & Restoration:

-Priority lands: Humbug Chrysler Complex & Pte. Hennepin Complex & Gibraltar Bay Complex (Sugar Island, GI Nature Center & Round Island): Key areas of IWR relative to land acquisition & restoration

-Watershed: expands beyond the jurisdiction of the IWR; can we address here?

- Recreation & creation of new habitat (SSP seawalls)

Environmental Contamination:

-Federal policy of non-acquisition of HTRW contaminated land

-environmental contamination is pre-existing & outside sources outside of IWR direct control

-Monitoring inadequate

-Protection (oil spills & illegal discharges)

-Enforcement : not adequate (Need environmental prosecutor?)

-Policing (governmental & community/interest group activation)

Bob: 3 priorities

Reduction of Pollution

Preservation of Habitat/Land

Preservation of Wildlife within Habitat

There are many underlying issues related to refuge, so being specific relative to habitat is difficult (if habitat is created they still may not come).

Influences outside control of the Refuge (acquisition of land, contamination, watershed management & public education). These influences will impact traditional wildlife management; management must be willing to work outside the area of the IWR. Management practices can affect these outside influences.

3 Components Important to Land Manager: Aquatic Habitats, Land Habitat, Contaminants

Do we separate usage from stewardship? Doesn't do much good to restore if don't have control (ownership).

Monitoring & lack of technology is problem: still have oil spills but can't find source.

Enforcement of laws, does FWS have authority; no, but can influence.

MDNR manages the watershed: (Conservation Enhancement Program) educate landowners on watershed management. Education & private partnerships outside area is important.

Land manager can only influence land within ownership. If we want to improve the refuge, we must get outside of the refuge boundaries.

Group 1's Top Three Issues

1. Habitat Restoration, Management, Creation

- What lands need to be owned & what doesn't need to be owned
- Coastal marshes
- Prairies
- Exotics

2. Control of the Habitat

- Direct Control (Land acquisition, land protection)
- need adequate riparian buffer-
- Indirect Control-outside ownership/protection
- habitat protection
- partnerships
- Coastal marshes

3. Contamination/Pollution (Control, Enforcement & Policing)

- Outside Influences (contaminants & restoration)-external: Can influence programs that oversee other projects via Partnerships

Additional Thoughts:

Identify vegetation and habitats other than those traditionally (non-game spp. & habitat) thought of by hunters and anglers: reptilian habitat and prairies, for example.

Point/Non-Point contaminants

Historical point sources: mercury, etc

Uncontrolled/Poorly controlled point sources

Change Land Protection as an issue to Habitat Protection (direct ownership)

Oil Spills are still a problem

Group 2: Partnerships, Hunting, Environmental Education, Wildlife Observation, Secondary Uses

- 1) Partnerships - How do we establish them?
Public Outreach
- 2) Environmental Education/Interpretation
Hiking, x-sking, wildlife observation, biking
- 3) Hunting/Trapping/Fishing
Maintain these opportunities
- 4) Secondary Public Uses
Trapping
Recreational boating
How is recreation compatible with habitat, etc..

Public Uses

- 1) How to establish functional partnerships and implementation, between a variety of interests?
- 2) How do we educate the vast human population in SE Michigan so that they realize the importance of, and support the various elements of habitat, management and fish and wildlife populations within the refuge?
- 3) How to provide as much hunting and fishing within refuge without impacting other primary uses?
Public concern that it will not be allowed
How will the CCP address the issue for hunting and fishing?

Group 2's Top 4 Issues:

- 1) How to establish functional partnerships between a variety of interests?
 - Implementation
 - Includes shipping, Industry, and Control Agencies
 - Active participation of scoping water resource development projects.
 - Control exotic species

- 2) How do we educate the vast human population in SE Michigan so that they realize the importance of, and support the various elements of habitat, management and fish and wildlife populations within the Refuge?
- 3) How to provide as much fishing within Refuge without impacting other primary uses?
 - Premier walleye fishing in the Midwest, 15 states
 - Concern that it will not be allowed
 - What is management planning going to be for hunting and fishing
- 4) Secondary public uses
 - Trapping, boating
 - Recreational boating will be an issue in this region.
 - How is recreation compatible with habitat, etc?

Goals Exercise

Goal Review and Revision Exercise: The vision-supporting "elements" from the October, 2001 publication, A Conservation Vision for the Lower Detroit Ecosystem are actually goal statements that can be adopted for use by the Refuge. In this exercise, we divided the elements amongst the two working groups for review and crafting into draft goal statements for the Refuge.

Group 1

- 1) Establish functional partnerships (involving communities, industries, governments, citizens, non profit organizations and others) to manage and promote the Refuge consistent with the plan's vision statement and the Act which created the Refuge
Public Law 107-91
 - Establish common partnerships for the Vision and IWR.
- 2) The Refuge will facilitate and promote hunting, fishing, wildlife observation, wildlife photography, environmental education, and interpretation as wildlife dependent recreational uses.
- 3) Visitors and local citizen's demonstrate a strong conservation ethic that supports the Refuge and broad based environmental awareness.
 - Refuge Watershed
 - Great Lakes Watershed
- 4) Future development that occurs within the Refuge's watersheds that may impact the Refuge is well-planned, environmentally sustainable, and reflects known best management practices.
- 5) People living or working within the Refuge watershed will understand and appreciate the importance and ecological value of the Detroit River and Western Lake Erie and their contributing watersheds to fish and wildlife and human quality of life.

6) The hunting, fishing, and trapping heritage, cultural resources and cultural history of the Refuge are valued and preserved, and connect Refuge staff, visitors, and the community to the area's past.

Group 2

Group 2 worked on goal statements 7 through 11. The revised statements were recorded on flip charts and are presented below. The combined list of goals were reviewed by both groups in a plenary session. A few wording changes were made during the combined group session.

Combined Goals for the two working groups:

1) Establish functional partnerships (involving communities, industries, governments, citizens, non-profit organizations and others) to manage and promote the Refuge consistent with the plan's vision statement and the Act which created the Refuge. Provide an institutional framework to develop effective private or public partnerships for the purpose of sustainability. (see Summary section for wording changes)

2) The Refuge will facilitate and promote hunting, fishing, wildlife observation, wildlife photography, environmental education, and interpretation as wildlife dependent recreational uses.

3) Visitors and local citizens demonstrate a strong conservation ethic that supports the Refuge and broad based environmental awareness.

4) Future development that occurs within the Refuge's watersheds that may impact the Refuge is well-planned, environmentally sustainable, and reflects known best management practices.

5) People living or working within the Refuge watershed will understand and appreciate the importance and ecological value of the Detroit River and Western Lake Erie and their contributing watersheds to fish and wildlife and human quality of life.

6) The hunting, fishing, and trapping heritage, cultural resources and cultural history of the Refuge are valued and preserved, and connect Refuge staff, visitors, and the community to the area's past.

7) Fish & Wildlife communities are healthy, diverse and self-sustaining.

8) Reduce levels of toxic substances to a threshold that does not threaten or harm or adversely affect wildlife, fish or human health.

9) Economic development and redevelopment is environmentally sustainable, well planned, and aesthetically pleasing.

10) IWR (water?)resources are swimmable, drinkable, fishable.
(see Summary section for wording changes).

11) IWR resources are responsibly managed (balanced?) for “some type of “ uses.
(conflicting uses?) (see Summary section for wording changes).

Management Alternatives Exercise:

Background: The draft Comprehensive Conservation Plan will include an Environmental Assessment (EA) that evaluates several management scenarios, or alternatives, for the Detroit River IWR. The EA will be prepared using guidelines established under the National Environmental Policy Act of 1969. The Act requires federal agencies to examine the effects of proposed actions on the natural and human environment. The EA will describe 2-4 alternatives for future Refuge management, the environmental consequences of each alternative, and our preferred management direction. Each alternative will include a reasonable mix of fish and wildlife habitat prescriptions and wildlife-dependent recreational opportunities. The preferred alternative will be selected based on potential environmental consequences and the ability for the alternative to achieve the refuge’s purpose. The CCP will ultimately be derived from the preferred alternative and will set the management direction for the Refuge for the next 15 years.

The agenda for the workshop included a group management alternatives exercise. During recent planning efforts for other refuges in the Midwest this has proven to be a difficult task to accomplish in a workshop setting. The precepts of the exercise were presented to the participants late on the second day of the workshop. After a slow start, the workshop facilitator decided to forego the exercise and begin work on writing objectives.

Objectives Exercise

The two working groups were given the assignment to develop specific objectives for each of the new goals. The groups were directed to try and use the SMART criteria approach to writing objectives (Specific, Measurable, Achievable, Results-oriented, and Time-specific). Time was very limited for this exercise (~8 hours) and the task was large. Therefore, the objectives written vary in their ability to meet the SMART criteria. Some objectives are very broad and resemble a goal statement and some are very specific and could be considered strategies. Ultimately, the writers of the CCP will need to refine the objectives, create strategies from some, and eliminate a few. However, the issue or thoughts behind the recommended objective will be retained somewhere in the CCP.

Group 1: Public Use and Partnership Objectives

Goal 1

Establish functional partnerships involving communities, industries, governments, citizens, non-profit organizations and others to manage and promote the Refuge consistent with the plan’s vision statement and the Act which created the Refuge.

Provide an institutional framework to develop effective private or public partnerships for the purpose of sustainability.

Objective 1

- ? Identify 50 potential partners in 1 year.

Objective 2

- ? Steering committee appointed in 6 months to represent all interests in the Refuge. Committee of the whole (steering group). Compatibility Determination by Refuge Manager.
Coordination/Advice/Integrate interests with Refuge

Objective 3

- ? Task groups (TGS) designated by Committee of the Whole (Detroit River IWR Steering Committee).
In one year, task groups formulate their strategies and recommendations, for land acquisition of private properties.

Objective 4

- ? Develop framework, define focus areas, standing responsibilities, identify goals of working groups in 1 year. NGOs, business leaders, resource users, outdoor recreation.

Objective 5

- ? Develop a Friends of DRIWR group in 1 year, pool of volunteers (bylaws) (non management charge), environment education).

Goal 2

The Refuge will facilitate and promote hunting, fishing, wildlife observation, wildlife photography, environmental education, and interpretation as wildlife dependent recreational uses.

Objective 1

- ? In 1 year, define access points and refuge boundaries.

Objective 2

- ? In 2 years, provide quality waterfowl hunting experience for current and future hunters.

Objective 3

- ? In 1 year, develop a leaflet identifying access locations for public hunting and fishing areas in the refuge within federal and state guidelines.

Objective 4

- ? Allow fishing and hunting to the maximum extent, except when there are contaminant issues/ exposure or specific species needs.

Objective 5

- ? In 3 years provide environment education program for xxxx participants per year to increase the community's understanding and appreciation of the Refuge.

Objective 6

- ? To assist Wayne County in development of an administrative/interpretive facility for the Daimler/Chrysler site.

Strategies

- ? Quarterly Newsletter ("Refuge News"), video, cable TV
- ? School curriculum on DTRIWR (include same in MEAP test), mail xxxx leaflet get to educators/school systems.
- ? Establish Web Site for DTRIWR, including education opportunities, participation workshops for local teachers, realtors, townships/ county/City Planning commissions.
- ? Make 100,000 annual visitors aware of IWR resources (F&W) and public use rates (fishing, boating bird watchers, biodiversity rating) and its role in the Great Lakes ecosystem.
- ? Publish a birding trail highlighting key watch areas within the Refuge.
- ? Within 1 year develop photo blinds in various locations to provide and highlight wildlife photo opportunities in the Refuge, ie. Mud, Calf, Humbug, and Daimler/Chrysler Tract/ Pte. Moullie SGA, Lake Erie Metro Park, etc.....

Goal 3

Visitors and local citizens demonstrate a strong conservation ethic that supports the Refuge and broad based environmental awareness.

Objective 1

- ? In 2 years develop public education program to educate 50% of the people of SE Michigan about the refuge.

Strategies:

- ? Develop a logo/slogan (marketing/publicity campaign)
- ? Host an annual "Refuge Days" street fair involving all downriver communities.

Objective 2

- ? In two years 50% of the 4th graders will be able to explain the food web.
- ? (Add general environmental ed. objective)

Objective 3

- ? Within 3 years of an approved plan, community and business support of the Refuge will be visibly evident throughout associated communities

Strategies

- ? Develop methods for business communities to show support (e.g. street banners, posters, window decals, etc.)
- ? Steering committee to develop measures by which to judge who should be recognized & how

Goal 4

Future development that occurs within the Refuge's watersheds that may impact the Refuge is well-planned, environmentally sustainable, and reflects known best management practices.

Objective 1

- ? Within 2 years make the regulatory (permitting) agencies aware of the DWRIWR goals and visions (ie. SEMCOG, MDEQ, USACOE, ETC..)

Objective 2

- ? Within 1 year of plan refuge staff and partners are representing Refuge interest as participants in SEMCOG, and other Planning Processes within the Region.

Objective 3

- ? Within XX years, a formalized clearinghouse will be in place to provide streamlined review and (coordination) approval of all development proposed within the DWRIWR boundary. The composition of this organization will be determined by USFWS staff and the steering committee. (Potentially this could be a group within SEMCOG, review for representative agency and IWR interests; include representation to assure BMP and environmental sustainability review) (also think about internal USFW clearinghouse)

Goal 5

People living or working within the Refuge watersheds will understand and appreciate the importance and ecological value of the Detroit River and Western Lake Erie, and their contributing watersheds, to fish and wildlife and to human quality of life.

Objective 1

- ? Within 1 year of plan approval, all plan/planning commissions, township boards, city government, and major landowners, will have been informed as to the importance of DWRIWR and its associated waterway connectors as a migratory bird corridor and importance of fish habitat to the Detroit River watershed.

Strategy - Within 2 years of approved plan, at least one interpretive display and promotional materials in each township/city public place, parks, SGA, etc.. showcasing goals/objectives/vision of Refuge.

Objective 2

- ? Within 3 years, 50% of real estate agents and corporate relocation dept. will include information about refuge in material promoting the area.

Goal 6

The hunting, fishing, and trapping heritage, cultural resources and cultural history of the Refuge are valued and preserved, and connect Refuge staff, visitors, and the community to the area's past.

Objective 1

- ? Within 1 year of new facility being constructed, there will be displays I.D. the key heritage values of the area., i.e. such as ship building, hunting, fishing and trapping. Link information to other educational information available in the area.

Objective 2

- ? Refuge promotional and educational materials incorporates a section that highlights these heritage values.

Objective 3

- ? Insure (staff and volunteer) training includes highlights these values.

GROUP 2: Habitat Objectives

Goal 7

Fish & Wildlife communities are healthy, diverse and self-sustaining.

Objective 1

- ? Protect & manage remaining-ecologically significant areas

Objective 2

- ? Protect, enhance, restore globally significant natural communities. (e.g. reseed/replanting of native plant species as identified as appropriate for the refuge)

Objective 3

- ? Within 2 years of plan approval, develop a native seed inventory and sources

Objective 4

- ? Protect and enhance remaining populations of Federal and State-listed (protected) species and prevent the listing of any species (jargon???)

Objective 5

- ? Within 1 year of Plan's approval, identify and prioritize areas best suited for restoration (e.g. coastal wetlands, lakeplain prairies, forested wetlands, oak openings, and riparian buffers).

Objective 6

- ? Within 3 years of Plan's approval, conduct gap analysis.

Objective 7

- ? Within 6 months of plan's approval, identify and prioritize ecologically significant habitat areas for protection.

Objective 8

- ? refuge staff will meet with all local governmental jurisdictions periodically to advocate zoning and comprehensive land use planning that promotes no net loss and protection of existing habitat.

Objective 9

- ? Within 3 years of plan's approval, protect (purchase, land trust, easements etc.) 50% of remaining habitat (e.g. coastal wetland complex and lakeplain prairie).

Strategy - target protection of Humbug Marsh Complex, Hennepin Marsh Ecosystem, and Conservation Crescent.

Objective 10

- ? Within 10 years of plan approval, protect the remaining habitat (e.g. intact coastal wetland complex and lakeplain prairie).

Objective 11

- ? Within 10 years 50% of open space on private land is managed as habitat.
(similar objectives for lands appropriate for restoration)

Goal 8

Reduce levels of toxic substances to a threshold that does not threaten or harm or adversely affect wildlife, fish or human health.

Objective 1

- ? Within 1 year of identifying parcels in priority order, complete a level I environmental review on accessible priority parcels.

Objective 2

- ? Liability issues will be decided based upon DEQ/EPA criteria.

Objective 3

- ? Within 6 months of plan approval, identify mechanisms for addressing contaminant issues under different types of agreements (fee ownership, easements, MOUs)

Objective 4

- ? Within 1 year of plan approval, establish partnership with State, Federal, local agencies, nonprofits & industrial partners to facilitate creative solutions to contamination sources and liability issues based on intended future restoration and use.

Objective 5

- ? Monitor air quality within the refuge and present data to responsible entities.

Goal 9

Economic development and redevelopment is environmentally sustainable, well planned, and aesthetically pleasing.

Objective 1

- ? Within X year of plan approval, work with landowners, the business community and all local governments within the refuge boundaries to develop a refuge certification for development that is environmentally sustainable, well planned and aesthetically pleasing. (Look at other organizations' certification processes, e.g. Wildlife Habitat Council and NWF)
(For example conversion of coal-fired plants to gas)

Objective 2

- ? Within one year of developing the certification, meet with landowners, business and industry to inform them of the certification and encourage their participation and application.

Goal 10

Restore beneficial uses of water resources in the refuge.

Objective 1

- ? Detroit River Area of Concern is delisted

Objective 2

- ? Refuge will be an active partner in the Detroit River RAP and Lake Erie Lakewide Area Management Plan.

Goal 11

IWR resources are responsibly managed to resolve potentially conflicting uses (e.g. commercial and recreational boating conflicts with refuge values).

Objective 1

- ? Within x years of plan approval, establish a refuge program for environmental education and interpretation.